

WHAT IS CLAIMED IS:

1. A head supporting mechanism or a suspension apparatus comprising:
  - a load beam adapted to be attached with a
  - 5 magnetic head slider at one end; and
  - a head arm, a tip end of said head arm being joined with the other end of said load beam;
  - wherein a dummy weight is attached to a rear end of said head arm;
- 10 a center of mass of a portion including all of said magnetic head slider, said load beam, said head arm and said dummy weight coincides with a center of swing movement of said head arm in a radial direction of a recording medium and with a center of swing
- 15 movement of said head arm in a direction perpendicular to a recording surface of said recording medium.

  

2. A head supporting mechanism or a suspension apparatus according to claim 1, wherein said load beam and said head arm are joined in such a way that their center lines in the longitudinal direction coincides with each other, and attachment positions of said dummy weight are respectively arranged to be
- 20 symmetrical with respect to said center line, and attachment positions of a joining member for joining a voice coil motor for swinging said head arm in the

radial direction of said recording medium with said head arm are also respectively arranged to be symmetrical with respect to said center line.

5. 3. A head supporting mechanism or a suspension apparatus according to claim 1, wherein said load beam and said head arm are constructed as a single member.

10 4. A head supporting mechanism or a suspension apparatus according to claim 2, wherein said load beam and said head arm are constructed as a single member.

15 5. A head supporting mechanism or a suspension apparatus according to claim 1, wherein said load beam and said head arm are made of a resin.

20 6. A head supporting mechanism or a suspension apparatus according to claim 2, wherein said load beam and said head arm are made of a resin.

25 7. A magnetic head apparatus comprising:  
a magnetic head slider;  
a load beam adapted to be attached with said magnetic head slider at one end; and  
a head arm, a tip end of said head arm being

joined with the other end of said load beam;

wherein a dummy weight is attached to a rear end of said head arm;

5 a center of mass of a portion including all of  
said magnetic head slider, said load beam, said head  
arm and said dummy weight coincides with a center of  
swing movement of said head arm in a radial direction  
of a recording medium and with a center of swing  
movement of said head arm in a direction  
10 perpendicular to a recording surface of said  
recording medium.

8. A magnetic head apparatus according to  
claim 7, wherein said load beam and said head arm are  
15 joined in such a way that their center lines in the  
longitudinal direction coincides with each other, and  
attachment positions of said dummy weight are  
respectively arranged to be symmetrical with respect  
to said center line, and attachment positions of a  
20 joining member for joining a voice coil motor for  
swinging said magnetic head in the radial direction  
of said recording medium with said head arm are  
respectively arranged to be symmetrical with respect  
to said center line.

25

9. A magnetic head apparatus according to  
claim 7, wherein said load beam and said head arm are

constructed as a single member.

10. A magnetic head apparatus according to  
claim 8, wherein said load beam and said head arm are  
5 constructed as a single member.

11. A magnetic head apparatus according to  
claim 7, wherein said load beam and said head arm are  
made of a resin.

10

12. A magnetic head apparatus according to  
claim 9, wherein said load beam and said head arm are  
made of a resin.

15

13. A head actuator comprising:

a magnetic head including a magnetic head  
slider, a load beam adapted to be attached with the  
magnetic head slider at one end and a head arm a tip  
end of which is joined with the other end of said  
20 load beam; and

a swing portion of a voice coil motor having a  
support arm that swingably supports said magnetic  
head;

wherein a dummy weight is attached to a rear  
25 end of said head arm, said head arm being joined with  
said support arm via a joining member;

said head arm is biased, at a center of mass of

a portion including all of said magnetic head slider, said load beam, said head arm and said dummy weight, in a direction away from said support arm by a pivot pin provided on said support arm, so that said head  
5 arm is supported in such a way that it is spaced from said support arm by a predetermined distance with its substantially horizontal state being maintained.

14. A head actuator according to claim 13,  
10 wherein said load beam and said head arm are joined in such a way that their center lines in the longitudinal direction coincides with each other, and each of attachment positions of said dummy weight, each of attachment positions of said joining member  
15 and each of biasing positions of said pivot pin are respectively arranged to be symmetrical with respect to said center line.

15. A head actuator according to claim 13,  
20 wherein said joining member comprises an elastic member.

16. A head actuator according to claim 15,  
wherein said elastic member comprises a leaf spring  
25 having a U-like shape, a round portion and end portions of said leaf spring are arranged along a center line of said load beam and said head arm in

their longitudinal direction, said round portion is secured to either one of said support arm and said head arm, and said end portions are secured to the other one of said support arm and said head arm.

5

17. A head actuator according to claim 13, wherein said load beam and said head arm is constructed as a single member made of a resin.

10 18. A magnetic recording apparatus equipped with a magnetic head apparatus according to claim 7.

15 19. A magnetic recording apparatus equipped with a magnetic head apparatus according to claim 8.

20. A magnetic recording apparatus equipped with a head actuator according to claim 13.

20 21. A magnetic recording apparatus equipped with a head actuator according to claim 14.